

### Abstract

The invention relates to a method for the production of a locally limited diffusion layer on a metal component, said method comprising the following steps:

- application of a paste containing Cr, Si and/or Al, and containing activators, to the areas of the metal component to be coated;
- solidification of the paste to form a donor pack;
- covering of the regions, which are not to be coated and are adjacent to the donor pack, with a diffusion-blocking powder pack;
- heating to a temperature above 900°C in order to carry out the alitiation, siliconization and/or chromation take place;

as well as to the use of the method in the production of turbine rotors.

(Fig. 1)